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(H)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/860,844 09/29/97 WEININGER

S GP-100C1

HM12/1112

EXAMINER

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MARSCHEL, A

ART UNIT	PAPER NUMBER
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1655  
DATE MAILED:

11/12/99

14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks**

<b>Office Action Summary</b>	Application No. <b>08/860,844</b>	Applicant(s) <b>Weininger et al.</b>
	Examiner <b>Ardin Marschel</b>	Group Art Unit <b>1655</b>

Responsive to communication(s) filed on Aug 24, 1999

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

#### Disposition of Claim

Claim(s) 28, 29, 42, 44, and 49 is/are pending in the application.

~~Other than~~  Claim(s) 1-27, 30-41, 43, 45-48, 50, and 51 have been canceled. ~~is/are withdrawn from consideration~~

Claim(s) 49 is/are allowed.

Claim(s) 28, 29, 42, and 44 is/are rejected.

Claim(s) \_\_\_\_\_ is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

#### Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

#### Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). 11 sheets,

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1655.

Applicants' arguments, filed 8/24/99, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

Claims 28, 29, and 42 are rejected, as discussed below, under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28, lines 1-2, cite a method using a TBA or BBA but confusingly the BBA is never stated as to being used in the actual claim step(s). Clarification is requested via clearer claim wording as to whether the BBA usage is included or not in the claim practice due to its lack in actual claim steps.

Claim 42 is vague and indefinite as to the unclarity regarding the cooperativity between the OSA and other PNA components which cooperativity is undefined in the claim.

Claim 42 is additionally vague and indefinite because part (a) therein cites a single-stranded sequence which seems to contain both a 1/2 TBR which must hybridize with itself in a TNA.

Similarly, part (b) of claim 42 cites a 1/2 BBR which apparently hybridizes to a 1/2 TBR within a BNA. In both of these circumstances it is confusing as to what is meant wherein a sequence hybridizes to itself. Normally a complementary sequence which hybridizes to its complement is very different from what it hybridizes to, only being complementary.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim 42 is rejected under 35 U.S.C. § 102(b) as being anticipated by Collins (EPO 0,204,510).

Collins discloses a complex for detection wherein the signal is amplified by the attachment of multiple hybridized components to increase the number of signalling entities as depicted therein in Figures 1-8. This signal amplification is also summarized in the abstract and in more detail in the SUMMARY OF THE INVENTION in columns 4-9. This anticipates the detection method of

instant claim 42 due to the layered hybridized sequences.

Claim 44 is rejected under 35 U.S.C. § 102(b) and (e) as being clearly anticipated by Ladner et al. (P/N 5,096,815).

Ladner et al. at column 5, lines 28-55, clearly disclose a bacteriophage cro binding to Orl to form a complex which reads on instant claim 44. The bacteriophage disclosure directed to said cro moiety is given in the reference in column 1, lines 64-66. CI binding to DNA repressor regions is given in column 10, lines 34-47. This repressor function inherently requires nucleic acid binding.

Claim 49 is allowed.

Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703) 305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached on (703) 308-1152.

Any inquiry of a general nature or relating to the status of this application should be directed to the Chemical Matrix receptionist whose telephone number is (703) 308-0196.

*Ardin H. Marschel*  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER

November 8, 1999